
Compressed Gas Cylinder Return and Disposal Procedure



Revision: January 1991

By

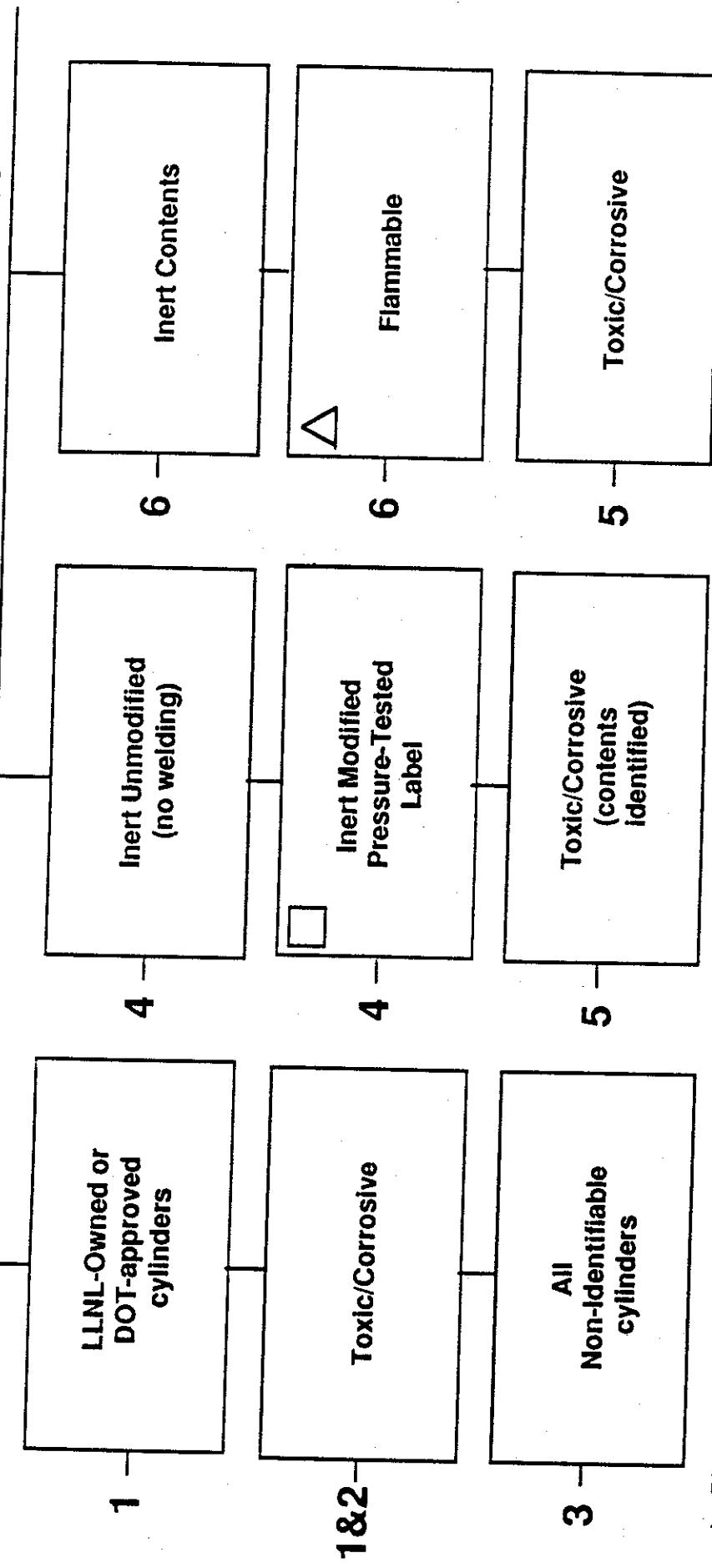
**Chuck Borzilleri
Pressure Safety Manager
L-384, Extension 2-6076**

Lawrence Livermore National Laboratory

Returnable, Vendor-Owned Cylinders
(Matheson, Air Products, LLNL, etc.)

DOT-Approved or
LLNL-Designed
Sample Cylinders
(Hoke, Whitley,
Nupro, etc.)

Disposable
(one time only)
Non-refillable



- Place in M.T. rack of gas storage sheds, cylinder status tag should indicate residue.
 - All compressed-gas cylinders whose contents are known, must be identified before they can be transported. (For off-site shipping, attach completed cylinder tag to outside of cylinder.)
 - Contact Charlie Otto (2-6899) or Dick Crawford (2-6309) for analysis.
 - Attach completed cylinder tag and send to High Pressure Laboratory Bldg. 343 for storage or disposal.
 - Attach cylinder tag and send to Toxic Waste Management Center for storage: CONTENTS MUST BE IDENTIFIED. You must also contact the Health & Safety Team in your area for toxic waste disposal tag, and pick-up schedule.
 - Vent and de-valve cylinder. Cylinder must be clearly labeled EMPTY and cylinder return tag attached before sending to Recalimation.
- Notify the Pressure Safety Manager of the M.E. or P.E. test number on label.
- Make sure Flammable cylinders are empty before attempting to de-valve the cylinder.

The New Cylinder Return Tag:



CYLINDER RETURN TAG-TOXIC/CORROSIVE GASES

A COMPLETED TAG MUST BE ATTACHED TO EACH CYLINDER BEFORE IT IS SENT TO INDUSTRIAL GASES B-518 FOR RETURN SHIPMENT TO VENDOR.
IF THIS IS NOT POSSIBLE, CONTACT TOXIC WASTE GROUP, EXT 2-1925
TO HAVE CYLINDER ANALYZED AND APPROVED FOR SHIPMENT.

YOUR NAME _____

EXT. _____

BLDG. _____

ACCT. NO. _____

CONTENTS _____

(IF MIXTURE, LIST ALL GASES AND THEIR PERCENTAGES)

PLEASE CHECK ONE: FULL PARTIAL EMPTY UNK
DOES THIS CYLINDER PRESENT ANY IMMEDIATE HAZARD? YES NO
YOUR SIGNATURE _____
L1336 (REV. 8/84)

For Cylinder Return Tags Contact:

Industrial Gases Extension: 2-9091 or
Your Building Coordinator or
Stores Catalog No. 7600-69272

Definitions:



Flammable

Any material which burns in air whether gas, liquid, or solid. A flammable gas when mixed with air can explode if ignited.

Corrosive

Any material which will attack and irreversibly damage human tissues, such as eyes, skin, and mucous membranes, as well as other substances, such as metal.

Toxic

The ability of a substance to cause injury to living things whether by breathing, skin contact, or swallowing.

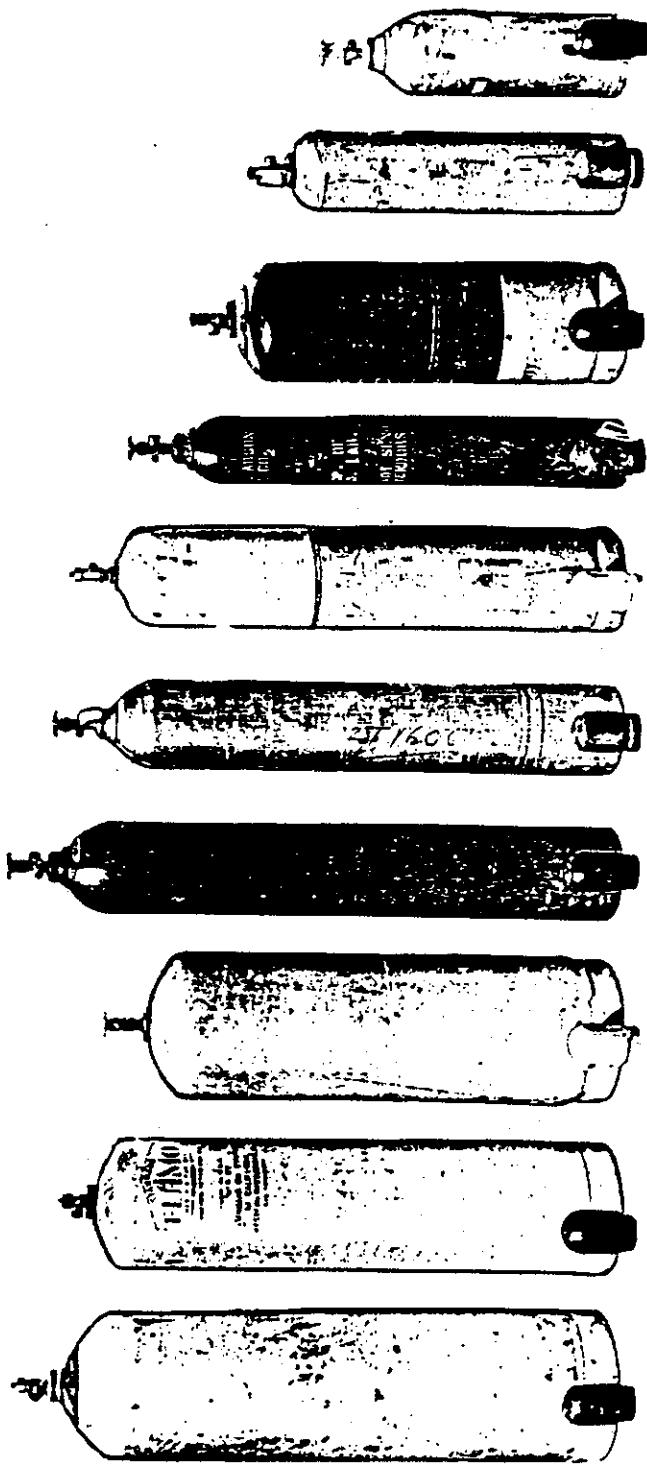
One More Definition:



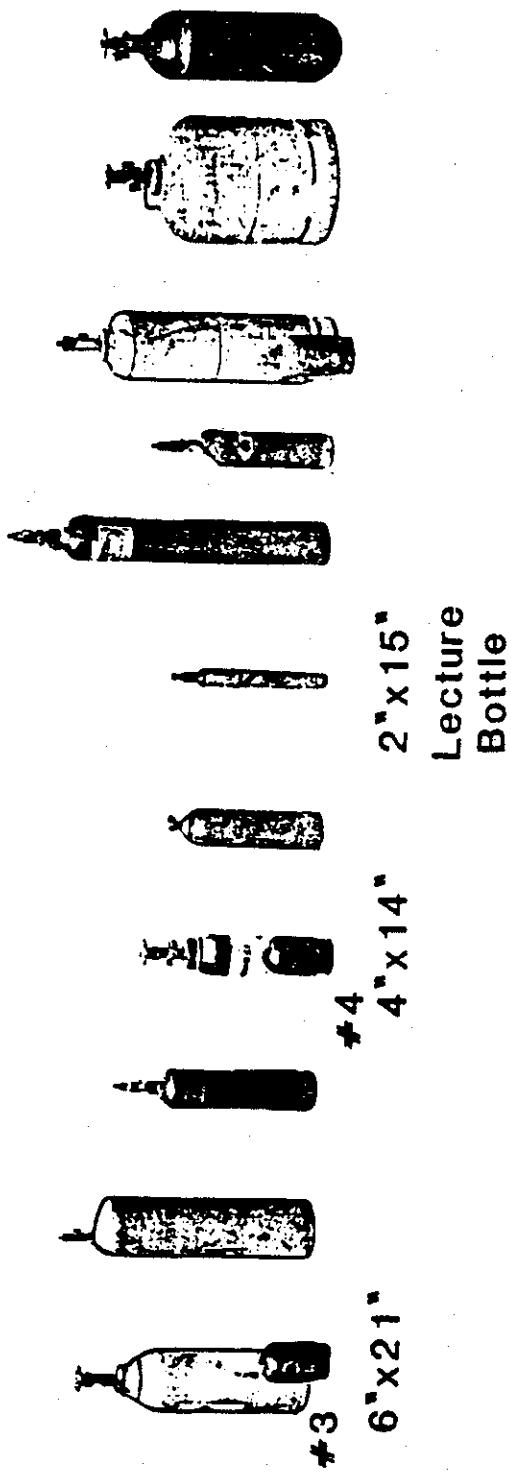
TLV

(Threshold Limit Value) An eight hour time weighted concentration expressed in parts per million by volume for gases and vapors that represents conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effects.

Gases: Compressed and Liquefied



#1
8" x 53"

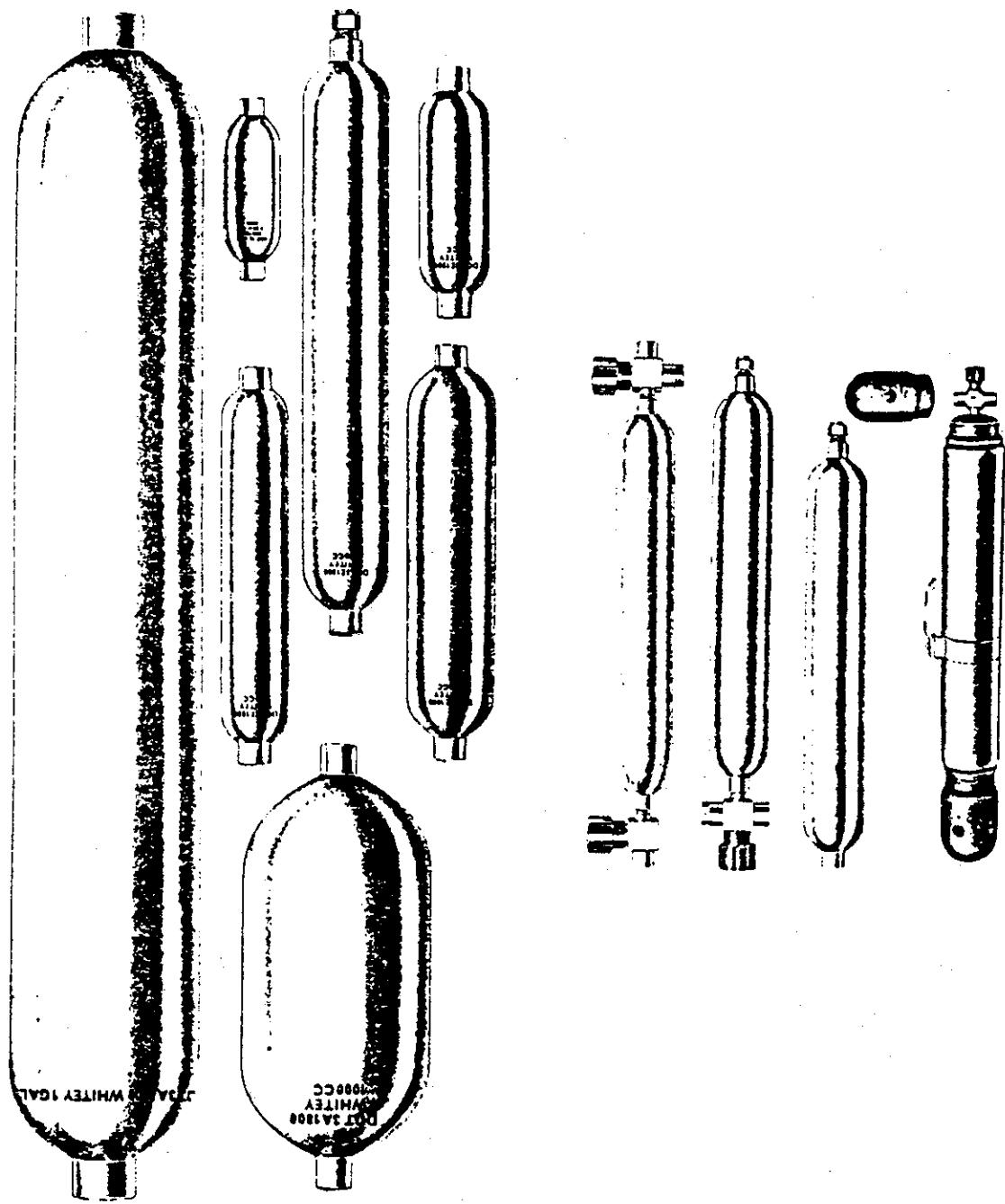


2" x 15"
Lecture
Bottle

#4
4" x 14"

#3
6" x 21"

Sample Cylinders



Pressure Safety Manager

Chuck Borzileri 2-6076

Reclamation

Ralph Kullman 2-9773

HAZARDOUS
Toxic-Waste Management

Industrial Gases

Fred A. Pocoroba 3-0187
Mike Gonigan 2-9091

Transportation

John Markowski 3-6861

Gas Analysis

Charlie Otto 2-6899
Dick Crawford 2-6309

Industrial Safety

Dave Counts 25249

Instrument Shop

John Sarginson 2-9762

High Pressure Laboratory

Owen Parker 3-1789
David Holten 2-9596
Jay Brentjes 3-2746
Emilio Romero 3-2750

Operational Safety

Joel Wong 4-6985
All Team Leaders 2-9915

Industrial Hygiene

Jerry Schweikert 2-5267